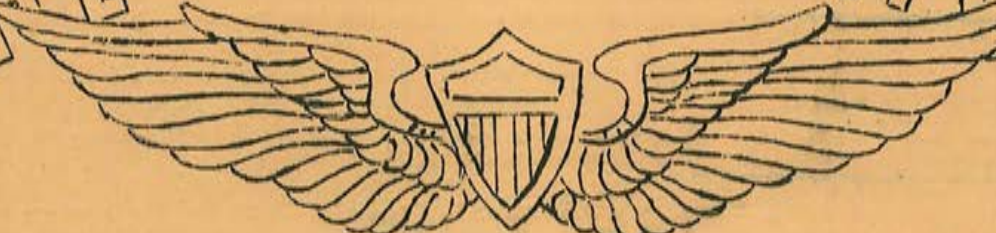


THE ARMY AVIATOR



ARMY AVIATION SCHOOL

Training the World's Best Aviators

VOL 3, NO. 6

Fort Sill, Oklahoma

June 1954

GEN HUTTON TO ASSUME COMMAND OF AAS

Brig Gen Carl I. Hutton will become Commandant of the Army Aviation School 1 July 1954. AAS welcomes Gen Hutton for the second time. He was Director of the Air Training Department of The Artillery School from August, 1946 to November, 1949.

Gen Hutton graduated in June 1947 from the Army Aviation Tactics Course and received his Army Aviator Wings. He was named Asst Director of the Air Training Department, and two months later became Director. In November, 1949, he was appointed Asst Chief of Staff for logistics of The Artillery Center of Fort Sill.

The General began his Army career when he enlisted 27 April 1925, and served as a private with Coast Artillery units until 2 Jun 1926, when he was appointed to the U. S. Military Academy from which he graduated in June 1930.

He first came to Ft Sill in March 1935, when he was assigned to the 18th Field Artillery Battalion. In August of that year he entered the Artillery

(Cont'd on Page 2)

COL WASHBURN DEPARTS AAS

Colonel I. B. Washburn, Commandant of the Army Aviation School, will be leaving 1 July 1954, for his new assignment as Chief of Staff of the Panama Military District.

Colonel Washburn became Director of the Air Training Department of the Artillery School in September 1951, and later was named Commandant of AAS upon its organization in July 1953. Under the command of Colonel Washburn, the school has expanded both in the number of students and in the number of courses offered.

The number of students in residence has increased from approximately 400 to over 200 and the School now trains over 2500 Officers and enlisted Men per year to crew Army aircraft. The number of classes per year for the various courses have increased. The largest increase in the number of classes has been in the Army Cargo Helicopter Mechanic's Courses. The number of classes in these courses alone have increased from four to sixteen classes per year since the School's organization.

(Cont'd on Page 3)

ARMY
AVIATION SCHOOL

COMMANDANT

COLONEL I. B. WASHBURN

DEPUTY COMMANDANT

LT COLONEL C. W. MATHENY, JR

ASSISTANT COMMANDANT

LT COLONEL E. L. HARLOFF

SECRETARY

LT COLONEL J. E. SWENSON

AAS COMMAND

LT COLONEL R. S. PRATT

DEPARTMENT DIRECTORS

FLIGHT

Lt Col C. Ernest

TACTICS AND GENERAL SUBJECTS

Lt Col E. H. Leer

COMBAT DEVELOPMENT AND PUBLICATIONS

Maj C. O. Bowen, Jr

AVIATION MAINTENANCE

Lt Col C. P. Damon

MATERIEL AND SERVICES

Lt Col C. W. Arey

MEDICAL

Lt Col R. H. Harrison

OPERATIONS

Lt Col A. L. Robinette

SAFETY

Capt J. H. Grinnell

Gen Hutton (Cont'd)

School. He completed the regular course in June and was assigned as Assistant Quartermaster at Ft Niagra, New York.

He was sent to Europe in 1942 as Quartermaster of the Western Task Force. In Jan 1943 he was appointed Assistant Artillery Officer of "I Armored Corps" with which he served in combat in North Africa. He was named commander of the 14th Field Artillery Battalion in March 1944, and led that unit in combat in France. In August 1944, he became Artillery Commander of the Second Armored Division, with which he served in combat in France, Belgium and Germany. In January, 1946, the division returned to the United States and was stationed at Camp Hood, Texas.

Following his assignments at Ft Sill as Director of the Air Training Department and as G-4, TAC, General Hutton was assigned to Army Headquarters, Washington, D. C., in January 1951, as executive to the Chief of Military History. He entered the National War College in September 1951 and was graduated in June, 1952. He was then transferred to Tokyo, Japan, as Deputy to the Asst Chief of Staff for logistics of the Far East Command. He became Commander of the 24th Division January, 1954, and in March was promoted to the rank of Brigadier General. On 31 March 1954 he returned to the United States and his new assignment as Commandant of AAS.

General Hutton has been awarded the Silver Star, the Bronze Star with three Oak Leaf Clusters, the Air Medal, the Croix de Guerre, and the Dutch Order of Orange Nassau in addition to Belgian and Russian decorations.

Col Washburn (Cont'd)

Under Colonel Washburn's command, the school has offered the following courses: Army Aviation Tactics, Army Helicopter Aviation Tactics, Twin-engine transition flight training, Army Aviation Instrument Training, Army aviation Instrument Flight Examiners Training, Army Cargo Helicopter Pilots Training, and Aircraft Mechanics Courses for both fixed and rotary wing aircraft.

During World War II, Colonel Washburn served 20 months in the European Theater of Operations with the 71st FA battalion. He participated in the battles of Normandy, Rhineland, Ardennes, Central Europe, and Northern France. Following World War II, he served with the Army of occupation in Germany.

Upon his return to the United States he attended Primary Flight School at San Marcos, Texas, and later the Army Aviation Tactics Course in the Air Training Department at Fort Sill. Upon completion of this course in 1947, he was awarded his Army Aviator Wings. He then attended the Army Air Force Special Staff School from which he also graduated in 1947.

His decorations, in addition to the European Theater of Operations Ribbon with four battle stars include the Bronze Star Medal with Oak Leaf Cluster, Croix de Guerre, Purple Heart Medal, ACR, EAME Campaign Medal, WWII Victory Medal, Army of Occupation Medal (Germany), and three overseas bars.

SUPER H-19

Sikorsky's Super H-19 was unveiled recently for the public. The new H-19, powered by a Wright R-1320 engine, features four-bladed main and tail rotors and a tail wheel. It will carry more passengers and will supersede the present H-19s. It should be in production in the Spring of 1955.

"THE ARMY AVIATOR" is an authorized publication published monthly by and for Army Aviation personnel. It is published at the Army Aviation School, Fort Sill, Oklahoma, under the supervision of the Troop Information and Education Officer and edited by Capt Weyman S. Carver. The views and opinions expressed are not necessarily those of the Department of the Army.

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Lieutenant: Robert W. Koopp

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Pfc Charles Warner

Contributions, written or cartooned, are solicited and may be mailed or delivered in person to "The Army Aviator", Army Aviation School, Fort Sill, Oklahoma.

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Telephone: 3178 or 7223

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CHAPLAIN'S CORNER

Your Chaplain invites you to attend the services of Worship regularly. The Chapel is never closed. It offers you a quiet place to Worship God at all times. Come to its Services.

Services are held every week for AAS personnel at Ft Sill in the Ft Sill CAUTIONMENT CHAPEL.

Sunday.....0945 hrs Protestant
1100 hrs Catholic

Your chaplain is available in any instance.

Telephone.....Office - 7112



Dear Editor:

Major William Livingston, former Executive Officer of Materiel & Services Section, has departed for his new station in Germany. Major Livingston will complete 30 years service while on this tour of duty.

Major Raymon J. Swozey and Capt Charles V. Carney have returned from Fort Hood, Texas where they participated in Operation "Spearhead" as Umpires.

Major Bruce H. Black has been assigned as Operations Officer for Materiel and Services Section.

Capt Everett E. McCarver recently joined the Materiel and Services Section and was assigned as Refueling Officer. Capt McCarver returned from Alaska where he served as a Post Transportation Officer. Capt McCarver is no stranger to Fort Sill as he has served six of the past ten years in Fort Sill, and was Post Motor Officer for several years.

Capt Lloyd J. Badgett returned from attending the Officers Associate Advanced Course, at the Transportation School, Fort Eustis, Virginia. He finished 8th in a Class of 58.

SFC Harry D. Pugh
Dept of Mat & Svc, AAS

DEPUTY COMMANDANT NAMED

Lt Colonel Charles W. Matheny, Jr. has recently been named Deputy Commandant of the Army Aviation School. The Deputy Commandant position is provisional pending revision of the School TD.

Lt Col Matheny was formerly director of the Department of Combat Development and Publications section of the School to which he was assigned in January, 1954, following his return from Korea. In Korea he served in combat with the 25th Inf. Div. and later as Senior Army Aviation Advisor for the Republic of Korea Army.

During World War II and during the occupation of Germany, he served with the 351st FA Bn. of the 1st Inf. Div. for a total of 33 months overseas.

He is a graduate of the university of Florida, and of the following military courses: Arty. Btry. Off. course, Arty. Off. Advance course, and the Command and General Staff College.

In addition to theater and occupation ribbons, Lt Col Matheny's decorations include the Air Medal with three Oak Leaf Clusters and the Bronze Star.

MAJ BOWEN ACTG DIR OF COMBAT DEV & PUB

Major Clifford O. Bowen has been assigned as Acting Director of the Department of Combat Development and Publications of the Army Aviation School. He has been with the department as Executive Officer since its organization in July 1953.

Before coming to AAS, Major Bowen served with the Planning Group, TAC, where he was assigned in December, 1951, after his return from Korea where he served as Asst Army Aviation Officer for the Eighth Army and as I Corps Arty Aviation Officer.



By
Capt E.M. Lynch
Dept of Combat Dev
& Pubs, AAS

that we could have attached a prop and flew the crates they were shipped in. And there was that IFon Curtain down the center of the Taro Leaf airstrip, and the six engine failures in one day off the Anju airstrip. And who could ever forget the bitter cold hours of flying crippled relics with three and four thousands hours on their tired old frames? And people talk about the droop on a B-52 wing!

One event stands out clearly in my mind. It was a meeting in August, 1950. Aviation officers from the First Cavalry, the Second, the Twenty-Fourth, and the Twenty-Fifth Divisions and Eighth Army met in a CP tent at the Taegu Airfield to discuss the difficult problems of Army Aviation in the current campaign. This was not a group of theorists or future planners. These men were bitterly experiencing the inadequacies of organization, equipment and logistics of Army Aviation, 1950.

To just give you the decisions that were reached, and not the thoughts behind those decisions, would be to give only a small part of a very large picture. Three major decisions were sent forward as recommendations. First the immediate formation of aviation companies rather than organic aviation. Second, that all observation aircraft would be equipped with the AN/ARC-3 radio. Third, that maintenance detachments would be formed in the rear areas to accomplish the field repair for the combat units.

Let me give you some of the reasons for these recommendations. First, the aviation company. All thinking at that time was toward the tactical commander alone, to provide him with organic aviation on immediate call. Much like the goose that laid the golden egg we Army Aviators felt it was about time we stopped thinking about the egg for a minute and gave some consideration to
(Cont'd on page 7)

The month of June marks the twelfth year of military life for the wings of an Army Aviator. Throughout that decade-plus-two we have seen those wings brightly shining, and we have seen them badly tarnished. Major efforts have been made to place them in an obscure drawer of a broken-down field desk from World War II. Many have advocated that their olive drab tint take on the blue of the skies they live in. Professional jealousies, like giant shears, have snipped at the spreading tips to stunt their growth in infancy. Unwarranted restrictions were placed on the loads those wings could carry aloft. To say that the road has been somewhat rocky would be the understatement of the century.

Despite the fact that my thoughts in CAVU should be toward the future, I cannot help but spend our anniversary reminiscing. About the early days of the Korean fracas. I like to call it "Operation Shoestring". Perhaps during no other period of our existence were we so "materiel poor", so organizationally inadequate, and so intelligently confused. But for the L-17 we could well have been called the Smithsonian Air Force. The "L" that graced the shield of our wings might have stood for LOST.

Many of the scenes of that play are still vividly alive today. You who were the Indianhead...can you ever get over the shock of crating up your L-16s for the glorious entry? Would



Located at Tinker Air Force Base in Oklahoma, the Severe Weather Warning Center of the USAF Air Weather Service is responsible for the issuance to the Air Force and Army of forecasts of severe weather conditions which present a threat to aircraft in flight and military ground installations within the continental United States. Such weather conditions include the tornado, high winds caused by thunderstorms, hail, and severe turbulence aloft.

Unlike most weather data, which are transmitted in a standard code, the forecasts of the Severe Weather Warning Center are transmitted in abbreviated plain language throughout the United States. They are sent out over the USAF weather teletype network, as is all other weather information collected by the Air Weather Service, in order that they may be available to all U. S. weather agencies, military and civilian.

At the present time, the Severe Weather Warning Center is under the command of Lt Col Ernest J. Fawbush, a pioneer in the field of severe weather forecasting, and is staffed by six forecasters and 13 observer-plotters.

Growth of the center into its present form as a specialized forecasting unit had its beginnings in March 1948. It was in that month that two particularly damaging tornadoes struck Tinker AFB within the space of only

five days, causing losses of several million dollars in damages.

Colonel Fawbush had been interested in the weather patterns associated with violent storms since his days as an enlisted forecaster at Barksdale AFB in Shreveport, Louisiana, in 1940. After the first of the two Tinker tornadoes hit the Oklahoma City base, he began to examine the weather patterns in existence just prior to the Tinker storms, relating them to those associated with several earlier tornadoes. Working in conjunction with Maj Robert C. Miller, one of his forecasters, Col Fawbush noted that there were certain similarities in the patterns. From this foundation, the two Air Force weathermen were able to evolve a set of empirical rules which they considered to be a step towards a technique for forecasting tornadoes.

On March 25, 1948, Fawbush and Miller put into practice their theories when they observed an air front that was similar to those that had produced previous tornadoes, and issued a storm warning for Tinker AFB.

At 6:10 that evening their suspicions were confirmed when a tornado passed directly across the base. It seemed as though they had proven their hypotheses.

After this confirmation of the practicality of their technique, the two weathermen made several more empirical forecasts for the Kansas-Texas-Oklahoma area. Out of 14 predictions, 13 were perfectly correct. During this period their forecasts were not disseminated over the teletype circuit, but were given to the U.S. Weather Bureau Office in Oklahoma City for informational purposes.

After two years of successful forecasting, early in 1951 the Air Weather Service relieved Fawbush and Miller of
(Cont'd on page 9)

MAINT-NOTES

By

Capt Clyde J. Dillon

Dept of Avn Maint, AAS



To inspect cables, run a cloth along the cable. If it snags you have broken strands. A 7 x 19 cable that shows more than 6 broken wires for one inch of length should be replaced. for a 7x7 cable three broken wires per inch is the maximum allowable.

§ § §

When replacing cable you can avoid fraying the ends during cutting by wrapping the location of the cut in tape.

§ § §

Dust and sand which clings to oil bearing surfaces becomes an efficient grinding agent, particularly to flight control surfaces. Better to ease up on the lubrication than to risk the grinding-wheel action.

§ § §

Many of the newer mechanics aren't familiar with the handling of dope in repair of fabrics. It is highly inflammable and cannot be extinguished by cutting off the oxygen supply. The best method of control is to rapidly cool the dope or doped fabric next to the flame. CO₂ is good.

§ § §

Diaphragm type pressure accumulators like the one in the H-19 hydraulic system are best checked for leaks

with soapy water. If the hydraulic system is equipped with an accumulator and the pressure drops to zero when a selector valve is changed (when the power pump is not operating), the air has probably leaked out of the accumulator. If the accumulator cannot be charged to operating pressure, the pressure regulator is probably set too low.

C.A.V.U (Cont'd)

the goose. Requirements on aviators organic to artillery units far exceeded those on any other aviator in the division. Many were flying as high as 175 hours a month under all conditions. Yet the division aviation officer had no jurisdiction over their utilization. In addition, there was a drastic duplication of aviation effort due to lack of coordination between tactical units of the division. There was a definite requirement for a central control agency. These are but a few of the many reasons why we felt the aviation company was the solution.

Let's take the AN/ARC-3 radio. In the initial stages of the campaign all fighter strikes in the immediate battle zone were controlled by Army aircraft. We knew that an Army aviator was superior to any other airborne controller for this mission because he had an accurate knowledge of the current ground situation, the positions of friendly troops, and the concepts of employment of those troops. They said we were not familiar with the capabilities and limitations of the aircraft we were controlling. This was disproven when we found that the only difference between a fledgling and an experienced controller was ONE MISSION. However, the only aircraft with VHF facilities was the L-17, and with its blind spots and Micky Mouse transmitter it was totally inadequate. Controllers from three divisions abreast

(Cont'd on page 8)



By Capt Harold C. Webb
Dept of Tactics & Gen Subj AAS

The following officer personnel changes occurred in this department since publication of the last edition of the Army Aviator:

Capt Elmer V. Merritt, TC, Senior Instructor, Tactics Section, departed on leave of absence enroute to Fort Lewis, Washington, for assignment to USAFFE. Capt Robert H. Hurst, Infantry, has assumed the duties of Senior Instructor, Tactics Section.

Capt Fletcher D. Grontzenberg, Arty; Richard D. Kiesel, Inf, and Edward S. Hawkins, TC, have been assigned duty as instructors in the General Subjects Section, this department.

Capt Joseph A. Jones, Arty, and 1st Lt David B. King II, Arty, have been assigned duty as instructors in the Tactics Section, this department.

The resignation of 1st Lt Howard B. Blanchard, Jr., TC, to enable him to return to civilian life to pursue his education, was accepted by the Department of the Army. Lt Blanchard was an instructor in the General Subjects Section.

A potential TC instructor has arrived in the household of Capt Charles B. McAllister, Jr. Philip V. McAllister was born on 23 May 54 at the Fort Sill Army Hospital.

C.A.V.U. (Cont'd)

found themselves on the same channel with no alternate.

Lastly, the maintenance problem, and believe me it was a problem! The aircraft we flew were one step from the grave and pilots seemed to feel that they were one step ahead of the aircraft. Mechanics whose job it was to nurse were faced with the problems of a surgeon and, in many cases, a mortician for their aircraft. The field maintenance units had to be moved as near as possible to the scene of the crime. This third recommendation was the only one that met with success. The other two were remembered on Memorial Days of '51, '52, and '53.

Yes, that was Army Aviation, 1950. The result of post-war mortal stagnancy. We who wear the wings of an Army Aviator must not let such a situation develop again. There must be no tarnish, no obscure drawers, no restrictions that make our missions of the future impossible to accomplish.

As we look back on that original set of wings let us bear in mind the real meaning of the "L" of World War II and the Pusan Perimeter: "LEST WE FORGET".

HELICOPTER ARTILLERY LIFT

"Five Whirlybirds Lift 105 Section" is the title of an illustrated article in the June '54 issue of Combat Forces Journal. The article, on page 18 of the magazine, describes in detail and shows in pictures the exact load and weight distribution of a disassembled 105 howitzer which is to be air lifted.

The same issue of the magazine carries the article by Maj Gen James M. Gavin on the use of "Helitroops" entitled "Cavalry, and I don't mean Horses".

POST FLIGHT

By
1st Lt R. W. Koepp
Dept of Flight
AAS

Lt Col J. W. Hill has taken over the reins as Supervisor of Rotary Wing from Major Gaddis who is presently acting in the capacity of Assistant Supervisor. Col Hill first came to Ft Sill in 1942 to attend a pilot course and ended up in the first experimental fixed-wing class. A Senior Army Aviator, he is certainly not without experiences that will benefit his command. Col Hill, we welcome you.

Finally a little info on the Dem Team. A very hectic schedule started on Saturday, 8 May 54 when the team held a practice, with spectators, at Strip #15. The practice was in preparation for Armed Forces Day and the demonstration at Post Field. From all reports the 15 May demonstration went quite well, including an unrehearsed "rifle pick-up", in lieu of the usual message pick-up, when the pick-up cord got tangled with the rifles with which it was being held aloft.

Immediately following the demonstration, the Helicopter Square Dance Team took off for Randolph AFB, Texas via an LC-126 and a Beaver. Helicopters were flown down earlier in the day. At Randolph the team put on four shows, all of which were readily accepted by large audiences.

The following weekend found the entire team at Camp Chaffee, Arkansas. Using Ft Smith as our base of operations, we commuted via Army busses to Camp Chaffee. The demonstration went fairly well but was continually interrupted or delayed by spectators crossing the strip or walking around in the demolition area. Saturday evening,

22 May, everyone was home again at Ft Sill.

Being unused to having a free weekend, the team immediately scheduled a picnic for the next Saturday. The picnic was held at Quanah Parker Lake and this seemed an appropriate time to present the traditional cigarette lighter to two departing members. Lt Jack O. Ray is heading for Panama (Poor lad!!!) and Lt Jack Kalmbach heading for Alaska (poor lad!!!) were the recipients.

Another "big orange" party was held at Annex #2 on 3 June 54. It was held in honor of WOJG John Greene who held down the role of "Bozo the Clown" and an important member of the Square Dance Team. Jack is now well on his way to FECOM (stab!!). He also was presented with an engraved cigarette lighter.

During the month of May, Fixed-Wing logged 6,508 hours, of which 2,394 were dual; Rotary Wing logged 6,146 hours, of which 3,412 were dual, and Standardization logged 669 hours.

You'd Better Believe (Cont'd)

routine weather station responsibilities at Tinker AFB and set up the Severe Weather Warning Center in its present form. Again the center's area of forecast responsibility was expanded, this time to include the entire continental United States. Operating on a 24-hour basis, the center would forecast as accurately as possible all severe weather conditions accompanying thunderstorms. These severe weather forecasts would be transmitted by teletype to all Air Weather Service installations throughout the United States. It was routine that they would also be available to all other U.S. weather agencies on the same basis as other weather information.

(Cont'd on Page 10)

You'd Better Believe (Cont'd)

Weather reports are received by the Severe Weather Warning Center at definite intervals throughout the day and night from all parts of the United States by regular teletype networks. These reports come from several hundred Weather Bureau, Navy and Air Force weather stations. The observer-plotter enters these reports in a coded form on weather maps, which are then "analyzed" by forecasters. Each of these analyses gives the forecaster a picture of the weather conditions over the United States for one representative time. Maps are prepared for weather conditions at the earth's surface and for levels of approximately 5,000, 10,000, 18,000, 30,000 and 40,000 feet above the earth.

Experienced forecasters examine these maps for certain combinations of weather factors which are expected to exist simultaneously at the various heights. Severe thunderstorms and tornado activity is indicated when a flow of very warm and very moist air moves northward from the Gulf of Mexico and is expected to be located beneath a flow of cold, dry air above 5,000 feet from the west. Tornado formations appear to require these conditions, coupled with a narrow band of strong winds at high altitudes.

When the forecaster believes that the various elements will combine to form a threat of tornado formation, an advisory forecast is sent out on the weather teletype. These advisories give such information as the type of severe weather forecasts, the maximum expected speed of wind gusts, the amount and height of turbulence, the size of hail, the geographic boundaries of the area expected to be effected and the inclusive times of the forecast.

A severe weather advisory received at an Air Force or Army installa-

"HELICOPTERS" TO MOVE ARMY IN FUTURE"

Helicopters will, in the near future, replace vehicular and other surface transportation for combat units. Lt Col C. W. Matheny, Deputy Commandant of the Army Aviation School predicted at the graduation of Army Primary Pilot Class 54G at Gary AFB recently.

"Few people have stopped to consider all that can be accomplished by the helicopter when it is properly utilized," he told the 61 graduating student officers.

"By proper use of aircraft like helicopters and convertiplanes, we can perform our tasks seven times faster
(Cont'd on Page 17)

(cont'd)

tion weather station becomes the basis for an immediate briefing for the installation commander or his authorized representative by the station weather officer, who interprets SMC advisories in the light of local weather conditions. Action taken to protect the base against expected severe weather is at the discretion of the base commander concerned and may include placing aircraft in base hangers, tying the aircraft down outside the hangers or, in extreme cases, evacuating aircraft to a base or bases outside the area for which severe weather has been forecast.

The U.S. Weather Bureau is responsible for the issuance of such weather information to the general public. Free interchange on a routine basis of all weather information collected by the Air Weather Service, the Navy Aerological Service and the Weather Bureau makes it possible for each of the country's weather services to utilize the full facilities of all in serving the particular needs of its own users.

ACCIDENTS

REVIEW OF AAS ACCIDENTS

Type and Model: L-19
Cost: \$9,158.00

Total Pilot Time: 125:00
Injuries: None

The pilot was attempting a normal take-off from Post Field at 1310 hours, 4 March. After obtaining clearance for take-off from the control tower the pilot proceeded with normal take-off procedure. The aircraft became airborne and at an altitude of approximately 50 feet, the engine failed completely and suddenly. The pilot attempted to establish a normal glide by lowering the nose and continued his landing in the direction of take-off which was to the southeast. Because of the low altitude, a glide was not established, and the aircraft struck the ground in a level flight attitude causing damage to the front and center fuselage, landing gear assembly, engine, top deck and both wings. The aircraft did not burn upon impact and there was no injury to personnel. The student stated during the investigation by the Accident Board that he performed a normal preflight inspection including draining both wing tanks and the carburetor. He also stated that the apparent reason for the oil pressure gage not functioning was merely that he did not allow enough time for the gage to operate. The fuel selector valve was neither in the main tank nor auxiliary tank position, but in between these two points. The pilot did not remember whether or not he had moved the fuel selector immediately after the accident when he turned off the fuel pump, generator, and battery switch. The Accident Board had this fuel selector valve assembly removed from the crashed aircraft and installed on a flyable airplane. Three members of the Board started this aircraft with the selector valve in the approximate position as indicated by the pilot. The engine would function normally up to approximately 1800 rpm; however, upon application of full throttle the engine after about one minute, would suddenly quit without any sputtering whatsoever. This test was performed five times by each of the three members of the Board with the same result. From the position of the fuel selector valve, the Board was of the opinion that the pilot did not move the fuel selector valve after the landing and that the positioning of the valve caused fuel starvation which resulted in the forced landing.

PRIMARY UNSAFE ACT: Pilot's failure to place the fuel selector valve in either the main tank or auxiliary tank position.

UNSAFE PHYSICAL CONDITION: None.

ACTION TAKEN: This accident is to be brought to the attention of all pilots, both rated and student.

RECOMMENDED FURTHER ACTION: Inasmuch as this accident was caused by improper procedures on the part of the student pilot, no further recommendations are made.

STATEMENT OF REVIEWING OFFICIAL: The findings of the Aircraft Accident Investigation Board are approved.

The Review Board concurs with the corrective action and analysis of the accident by the A.A.I.B.

Type and Model: L-23A
Cost: \$4,480.09

Total Pilot Time: 2226:00
Injuries: None

A civilian flight instructor, on a routine instruction flight, cleared Post Field, Fort Sill, at 0900 and flew directly to a neighboring airfield where most of the student instruction is normally given. The pilot stated that after arriving at the practice area, he made two simulated landings in the air using complete landing procedures to include raising and lowering the gear. Following the simulated landings, he made four normal full stop landings at a nearby airport. In all of these landings he stated that the landing gear responded normally.

After the full stop landings, two more simulated landings were accomplished in the air. On his attempt to lower the landing gear for the third simulated landing, the gear extended approximately one-fourth of the way down and then the 50 amp circuit breaker released. The circuit breaker was reset and the landing gear was raised electrically. He then noticed that the red "up" light was not burning and the warning horn was blowing. At approximately 1200 hours he contacted the Post Field Tower and told them he had landing gear trouble and was returning to Post Field.

Upon arrival at Post Field, the pilot made several fly-bys near the tower while control tower and Air Field personnel observed the landing gear. The landing gear appeared to retract correctly when manually operated, it also appeared to extend to the proper position but when a touch-and-go landing was made the gear started to collapse. The pilot again tried to retract the gear using the emergency extension system but this failed.

The landing gear was now in an extended position but was not down and locked. All attempts at lowering or retracting the gear electrically also failed.

In view of the above facts, the decision was left to the pilot as to how to attempt a landing. The pilot decided that an attempt to land with the gear in an unsafe condition was the last alternative. The pilot instructed his two students to move to the rear seat. All parachutes along with loose equipment were stowed in the rear baggage compartment. The pilot remained in the center front seat.

On the final approach the cabin door was opened and left ajar for quick evacuation. The aircraft was flown in with partial power applied at approximately 70 to 80 knots with the flaps set about 20 degrees. At the first contact with the ground, in a tail low attitude and with power still partially applied, the left main gear gave way. The aircraft started to swerve to the left. A slight amount of right brake was applied and the aircraft straightened out and settled evenly on all three gears. After settling, it rolled straight down the runway for approximately 800 feet. Both propellers, still turning, contacted the concrete runway and all four wooden blades were splintered. With the aircraft settled but still moving, the mixture controls were pulled to idle cut-off and the magneto and battery switches were turned off. Immediately after stopping, the students and pilot vacated the aircraft. When it was definitely established that there was to be no fire, the batteries were disconnected and the fuel selector valves turned to the "off" position.

An investigation was made of the damage to find the possible cause of the retract mechanism failure. It was noticed that the three actuators had bent to a doubled up position where the actuator nut assembly emerges from the actuator screw assembly. The actuators were disassembled. It was found that the left main gear actuator was the primary cause of the retract mechanism failure.

PRIMARY UNSAFE ACT: None.

UNSAFE PHYSICAL CONDITION: Failure of left main gear actuator.

CONTRIBUTING FACTORS: None.

ACTION TAKEN: All L-23's at this station which have over five hundred hours have been inspected. All others will be inspected at the major inspection nearest five hundred hours.

RECOMMENDED FURTHER ACTION: 1. Landing gear actuators on L-23 aircraft be replaced at one thousand hours with a disassembly inspection and complete relubrication at the inspection period closest to five hundred hours.

2. In the event of any gear trouble prior to five hundred hours, the landing gear actuators immediately be disassembled and inspected.

STATEMENT OF REVIEWING OFFICIAL: The findings and recommendations of the AAIIB are approved.

An Unsatisfactory Report has been submitted by the Transportation Contracting Officer's Representative.

REVIEW OF WORLD-WIDE ACCIDENTS

Type and Model: H-13E
 Cost: \$31,943.00

Total Flying Time: Unknown
 This Model: 161:00
 Injuries: Temp. Total (2)

At approximately 1115 hours on 9 March 1954, an H-13E was flying on an official operational mission near Yangyang, Korea. After making a high reconnaissance of a hill top area, the pilot brought the helicopter to a hover above a narrow saddle between two small hill formations that were part of a ridge line. After momentarily hovering into the wind, the pilot hovered a bit to the right where he attempted to land the helicopter. At this moment the helicopter turned over with the passengers' side laying upon the ground. The helicopter then flailed itself to pieces and immediately burst into flames. The pilot escaped with only a slight cut on his head whereas the passenger received severe burns upon his face and hands. At the time of the accident the visibility was very good. The wind was strong with possible gusts to 30 mph. Statements of witnesses and the pilot as well as examination of the wreckage disclose no material or mechanical failure. Examination of the site of the accident disclosed a distinct possibility that the pilot, while hovering, caught the aft portion of the right landing skid on a stump and rolled the helicopter over. Marks on the stump and blade marks on the ground substantiate this belief.

PRIMARY UNSAFE ACT: Selection of Marginal landing sight by aviator.

UNSAFE PHYSICAL CONDITION: The selection of landing sight was marginal.

CONTRIBUTING FACTORS: Strong and gusty winds with possible gusts to 30 mph.

ACTION TAKEN: All helicopter pilots briefed on dangers of landing on unapproved Helicopter Landing Pads.

RECOMMENDED FURTHER ACTION: No further action recommended. Flying technique and judgment was involved and can be corrected in this instance only by added experience.

STATEMENT OF REVIEWING OFFICIAL: No further action recommended.

Type and Model: H-13E
Cost: \$31,943.00

Total Pilot Time: 298:00
Injuries: Temp Total (1)

At approximately 1420 hours on 13 March 1954, the pilot was flying an H-13E on an official operational mission on Livingston Range near Toksen-ni, Korea. The pilot was making a steep approach to a hill, coordinates DT 310-150. Before reaching the hill top, on which he intended to land, the helicopter stopped short by several feet and crashed into the hillside. The helicopter rolled down the steep hillside for several hundred feet and as a result of the roll subject aircraft was completely wrecked. The pilot suffered minor cuts and abrasions. Visability was very good at the time of the accident. The aircraft was being landed into a slight wind at the time of the crash. Investigation of the wreckage disclosed that full throttle had been applied at some point by the pilot. The pad upon which the pilot intended to land was one of two small pads that were approximately twelve (12) feet in usable diameter. From the outside edge of one pad to the outside edge of the other pad was fifty (50) feet. Personnel were dug in around the edges of subject pads. Several officers were standing around these pads. The size of the pads, distracting personnel nearby and the high (1,000 feet from the valley floor) altitude of the pads all made a landing an extremely hazardous problem. The pads were in an unsuitable position. Statements by witnesses and the pilot indicate that rotor rpm loss and an improper approach were the direct causes of the accident, whereas certain psychological barriers were contributing causes of the accident. The accident happened due to pilot error, although there were mitigating factors involved.

PRIMARY UNSAFE ACT: Loss of rotor rpm and premature flare-out by the pilot.

UNSAFE PHYSICAL CONDITION: Landing pads too small for operational use.

CONTRIBUTING FACTORS: Congestion of personnel about the landing site.

ACTION TAKEN: Placed subject landing pads "Off Limits" to pilots of this unit.

RECOMMENDED FURTHER ACTION: A formal "Flight Evaluation Board" to determine the pilot's proficiency in Rotary Wing aircraft. Recommended action by Commanding General, 3rd Inf Div.

STATEMENT OF REVIEWING OFFICIAL: Concurrence with the findings of the board.

Type and Model: H-23B
 Cost: \$8,724.65

Total Pilot Time: Unknown
 Injuries: Temp. Total (3)

On 21 Jan 1954, at approximately 1600 hours, the pilot and two passengers prepared to return to the Ozark Army Field upon completion of a tactical exercise. The helicopter had been utilized at a field firing exercise and in conjunction with an Air Observer's School. The helicopter was started and checked by the assigned mechanic. The pilot further checked the operation of the aircraft during the preflight check. At this time he hovered the aircraft several seconds checking the engine and controls. Upon assuring himself that everything was operating properly, he started forward flight and headed towards Ozark Army Air Field. It was approaching dark and he took the shortest route which led him over a large, swampy, wooded area, slightly above tree top level. After reaching cruising air speed and attaining cruising throttle settings he noticed a loss of power. To enable him to increase the power setting to normal he applied additional throttle and checked the mixture control and carburetor heat. This did not increase the power output. He then lowered the pitch and applied full throttle which did increase the engine and rotor rpm. He saw that a surge of rpm and power was taking place and almost immediately the engine started to miss and sputter. This condition caused the engine and rotor rpm needles to separate and he tried to bring them together by applying more power, but this failed to alleviate the condition. At this time one of the passengers, a qualified helicopter pilot, attempted to aid the pilot in performing a quick stop to prevent hitting a large gum tree that he noticed in the path of flight. The quick stop was not executed in time and the main rotor blades made contact with the limbs of the tree. This caused additional loss of rotor rpm and the helicopter fell to the ground from an altitude of approximately 50 feet, landing on its right side.

PRIMARY UNSAFE ACT: None

UNSAFE PHYSICAL CONDITION: Unexplainable power loss.

CONTRIBUTING FACTORS: Loss of power.

ACTION TAKEN: Pilots briefed to follow roads or maintain a flight path that will enable them to make a landing in an open area if possible. Also to maintain sufficient altitude to bring the aircraft to a safe landing.

RECOMMENDED FURTHER ACTION: None.

"Helicopters to Move--(Cont'd)

than by truck."

"While helicopters are several times more costly than trucks initially, when all economic factors are considered, the cost approaches that of trucks," the Colonel said. "Officers in all services must be hospitable to new ideas, methods, and techniques in using helicopters and airplanes," he continued.

"It is unmistakably clear", he said, "that the Army will have airphibian units which will make air, land, and water assaults. Entire divisions will be moved by organic helicopters, and in the future, Army airphibian units will be able to move from Ft Sill to Alaska, a distance of 3,200 miles, in only two days," he predicted.

"Thus," he said, "airphibian units in emergencies will be able to move from London to Paris or from Tokyo to Seoul in hours. Such operations will eliminate the great amount of loading and unloading that slows moving of divisions."

"By utilizing these types of aircraft," he concluded, "our Army will be able to achieve mobility unsurpassed by any other military force in the world."

AAS PROMOTIONS

D/A announced during May the promotion of the following named officers in grade as indicated:

Major to Lt Col
Oscar D. Neumann

Captain to Major
Bruce H. Black

1st Lt to Captain

Edwin S. McClure
Patrick N. Delavan
Charles W. Sills
George A. Sullivan

2nd Lt to 1st Lt

George E. Scott

AAS TAKEOFFS

The following officers departed from AAS during May.

Lt Col Theodore F. Schirmacher Trans
Sch Ft. Eustis Va.
Capt Elmer V. Merritt USAREUR
Capt Julian A. Hawkins Iceland
1st Lt George W. Fried 77th FA Gp
1st Lt Marvin Barenstun USAH Ft. Eustis
148th Trans

Army Acft Rep Co. Ft. Sam Houston
1st Lt Herman Bernard TAC dy w/Post
QM Sec
1st Lt James O. Rymus Stu Off Co AAS
1st Lt Howard B. Blanchard Rel Act Dty
1st Lt James N. Brester USAREUR
1st Lt Charles W. Betz Rel Act Dty
1st Lt Lawrence Lindemuth Rel Act Dty
1st Lt Ralph M. Donley 41st FA Gp
CWO-2 Elton J. Meaux Rel Act Dty

AAS LANDINGS

The following named officers were welcomed to AAS recently.

Brig Gen Carl I. Hutton
Lt Col Raymond S. Pratt
Capt Joseph H. Jones
Capt Everett C. McCarver
Capt Jay R. Ketchersid
Capt. Richard D. Kisling
Capt Fletcher D. Grentzenberg
Capt Edward S. Hawkins
Capt William H. Clapton
Capt Colin D. Ciley, Jr.
1st Lt Eugene McGowan

(Cont'd on next page)

A A S Landings (Cont'd)

1st Lt John E. McGregor
1st Lt Emmett L. Sellers
1st Lt Eugene E. Weaver
1st Lt Davis M. Van Nortivick
1st Lt Richard B. Schaefer
1st Lt David B. King II
1st Lt Richard C. Moore
1st Lt Bud Wallace
1st Lt James W. Rhinohart
1st Lt Paul M. Caglo
1st Lt Orville H. Rinne
1st Lt Gilbert A. Bogley
1st Lt John L. Yunker
2nd Lt Frank L. Treece
2nd Lt William F. Mullinnix
CWO2 Marvin V. Wengrove
CWO3 Frederick G. Lieb
WOJG Harry L. Conyers
WOJG Wesley E. Rose
WOJG Verdell K. Schug

"UP AND LOCKED" LIMERICKS

by
Pfc Charles Warner

There was a young Pilot from
Sac City
Who lacked any
sagacity;
He philosophized when he should
have scrutinized,
And the government telegraphed
with alacrity.

///

There was a flyer from
Rhodes,
Who never checked his
loads,
His 'copter revolted and
came unbolted,
Now he travels by other
modes.

///

There was a young wife from
New Rochelle,
Whose husband thought he flew
quite well;
But her heart was smashed when he
accidentally crashed,
Now she hopes to join him in
heaven.

///

There was a flyer from
Aberdeen,
Who did too many loops in his
flying machine,
A quick anticeptic made him
eupptic;
Yet his complexion is still
quite green.

///

There was a young pilot from
Eric,
Who bad weather never made
leary,
"For you see," he would lie,
"I'm too young to die."
But the Almighty didn't agree with
his theory.

///

There was a student from
Chicago,
Who had trouble making his
plane go,
He revved it high in anger,
And took off through the hanger.
His reoperation has been rather
slow.

///

There was a young pilot from
Key West,
Who for whiskey had a
great zest
But flying and liquors
Mix like tuxedos and nickers,
For civilian employment he's now in quest

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